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# Pioneering a path to the future with JBoss Business Process Management

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# Road Map

- About SNS Bank
- Vision and Strategy
- BPM Architecture
- BPM Impact
- Lessons learned
- Conclusions



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# About SNS Bank

- One of the top 4 Dutch financial institutions
- Established in 1817
- Focus on retail banking:
  - *Mortgages, Savings & Investments*
- *Our values:*
  - *Personal, Accessible & Innovative*



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# SNS Bank's Vision back in 2006

- Increased competition leads to narrower interest **margins**
- An office based organisation is a **costly** distribution channel
- **Internet** becomes increasingly important in the orientation and sales cycle
- Online banking is the **future**
- At the same time, the need for quality and independent **advice** increases
- The value is in the relationship with the **client**, not in the relationship with the product

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# A New Strategy

- The customer behind the steering wheel:
  - A fully-fledged **online** bank with sales and services
  - Simple processes based on **self-service**
  - 5-clicks, paperless and in **realtime**



**=> We need “Straight-Through-Processing” (STP)**

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# The Solution

- This calls for a whole new architecture
- Enabling legacy systems to participate at any time
- Automating and managing our Business Processes



*Ouch!! this sounds very expensive..*

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# OSS to the rescue!

- We found the treasure to be in Open Source Software
- E.g. migrating our AIX servers with IBM WebSphere AS to Suse Linux servers with JBoss AS in 2005

**Reduced costs by 90%**  
*(saving millions of \$)*



=> New policy: OSS, unless..

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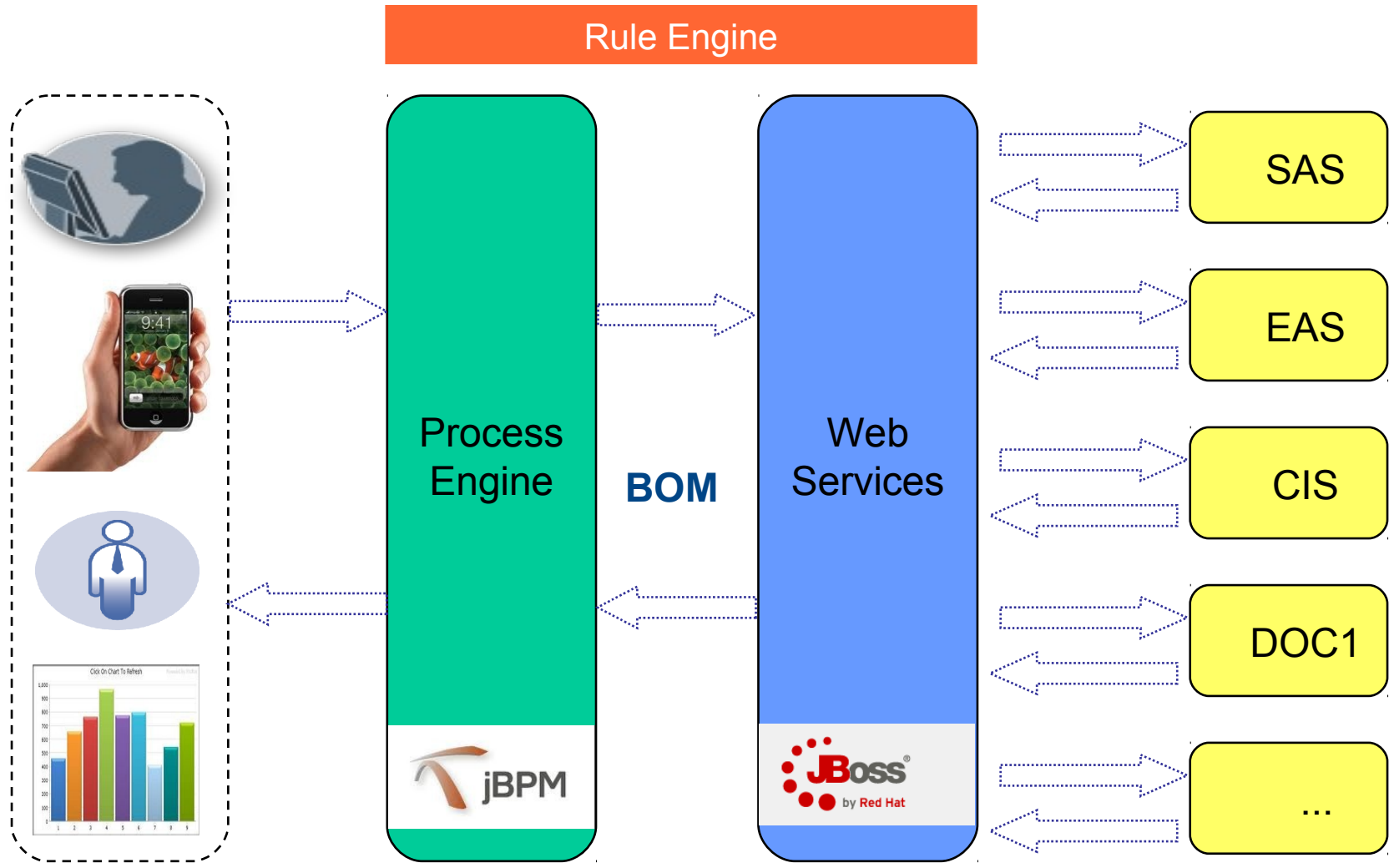
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# The BPM Architecture



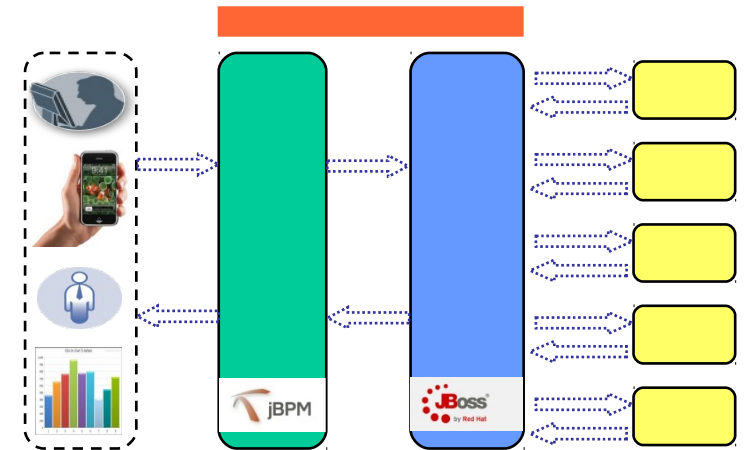
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# The BPM Architecture (2)



- Java based
  - Running on JBoss EAP 4.3
- (All except the legacy systems)
- Providing a canonical data model (our BOM)
  - Used as a common language for services and business processes (e.g. Customer, Contract, Lead/Deal, ...)
  - Invoked by various distribution channels

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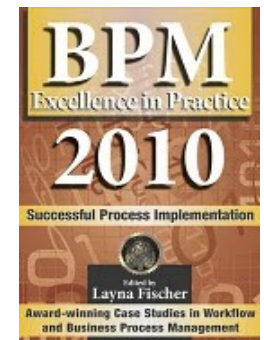
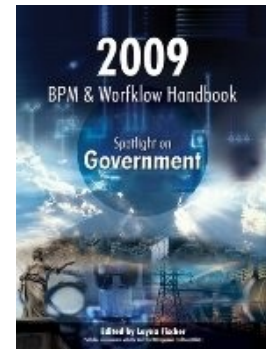
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# Survival in the Financial Crisis (I)

- Our BPM architecture in action
  - Time line of events:
    - Aug 2008 – first BPM savings products online
    - Mar 2008 – first draft to BPM 2008
    - Sep 2008 – crisis hits... recorded impact BPM
    - Oct 2008 – presented JFall 2008 (NLJUG)
    - Nov 2008 – chapter CaiSE / PRET 2009
    - Dec 2008 – chapter to BPM & Workflow Handbook 2009
    - Apr 2009 – published BPM & Workflow Handbook 2009
    - Jun 2009 – published CaiSE / PRET 2009
    - Aug 2009 – letter to President Obama
    - Nov 2009 – Silver award BPM Excellence in Europe
    - Sep 2010 – final publishing BPM Excellence in Practice 2010



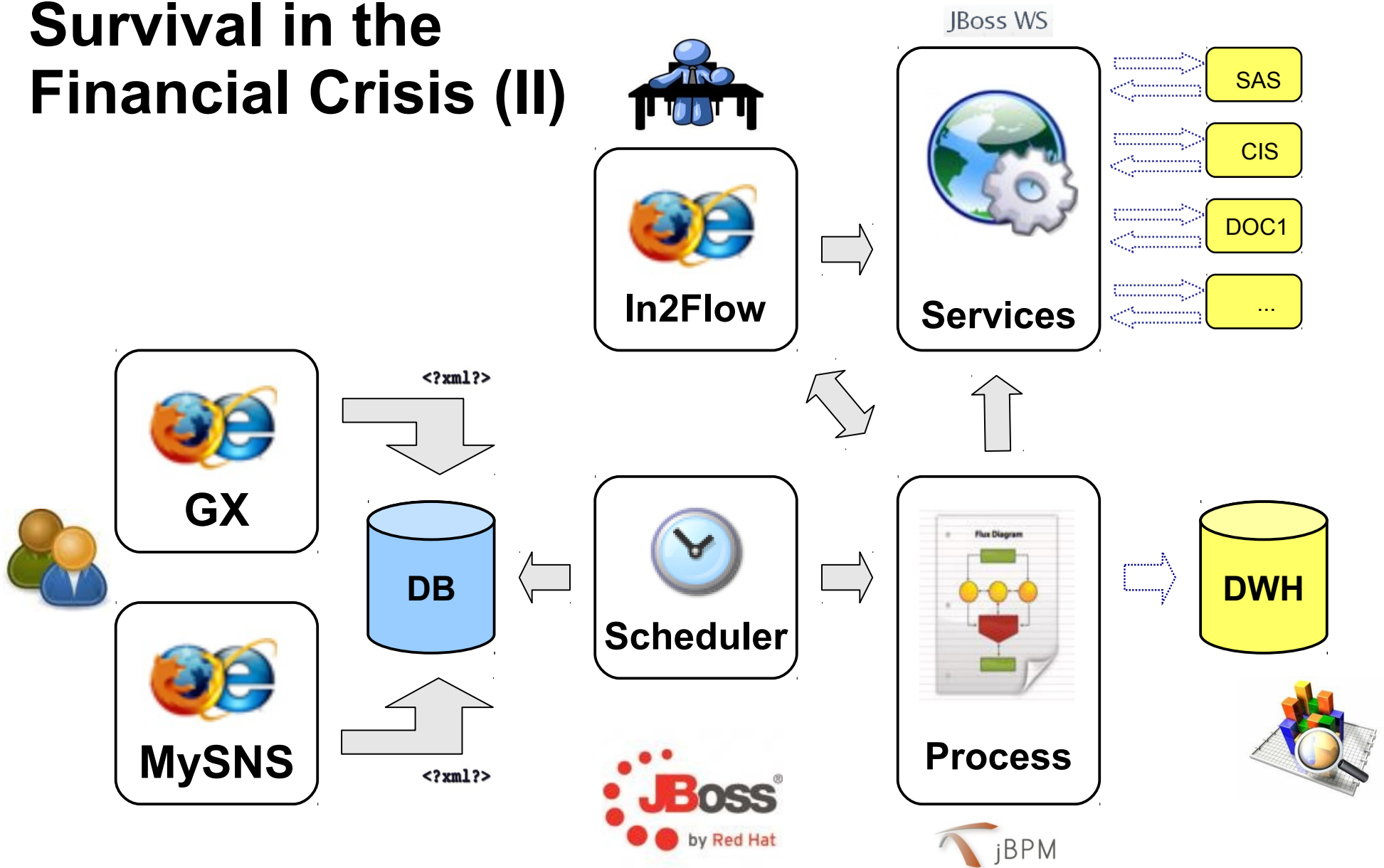
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# Survival in the Financial Crisis (II)



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# Survival in the Financial Crisis (III)

- Empirical data
  - Feb – Aug 2008 : ~1200 per month
  - Sep – Feb 2009 : ~3300 per month
- Overview effectiveness
  - 52% completed on time
  - 12% document monitoring
  - 8% rejected for various reasons
  - 0.7% Human action (functional)
  - 0.3% Human action (technical)
  - 23% removed, completed by hand
- Best practices / Pitfalls BPM



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# BPM impact on IT systems



- **Availability:** 24 /7

new SLA's, no/less maintenance windows & batch jobs

- **Integrity:** what data is “leading” ?

integration and normalization of both systems and data

- **Security:** more open means less secure?

“new” signing/encryption technologies, WS-Security

**=> More agile and flexible: shorter time-to-market**

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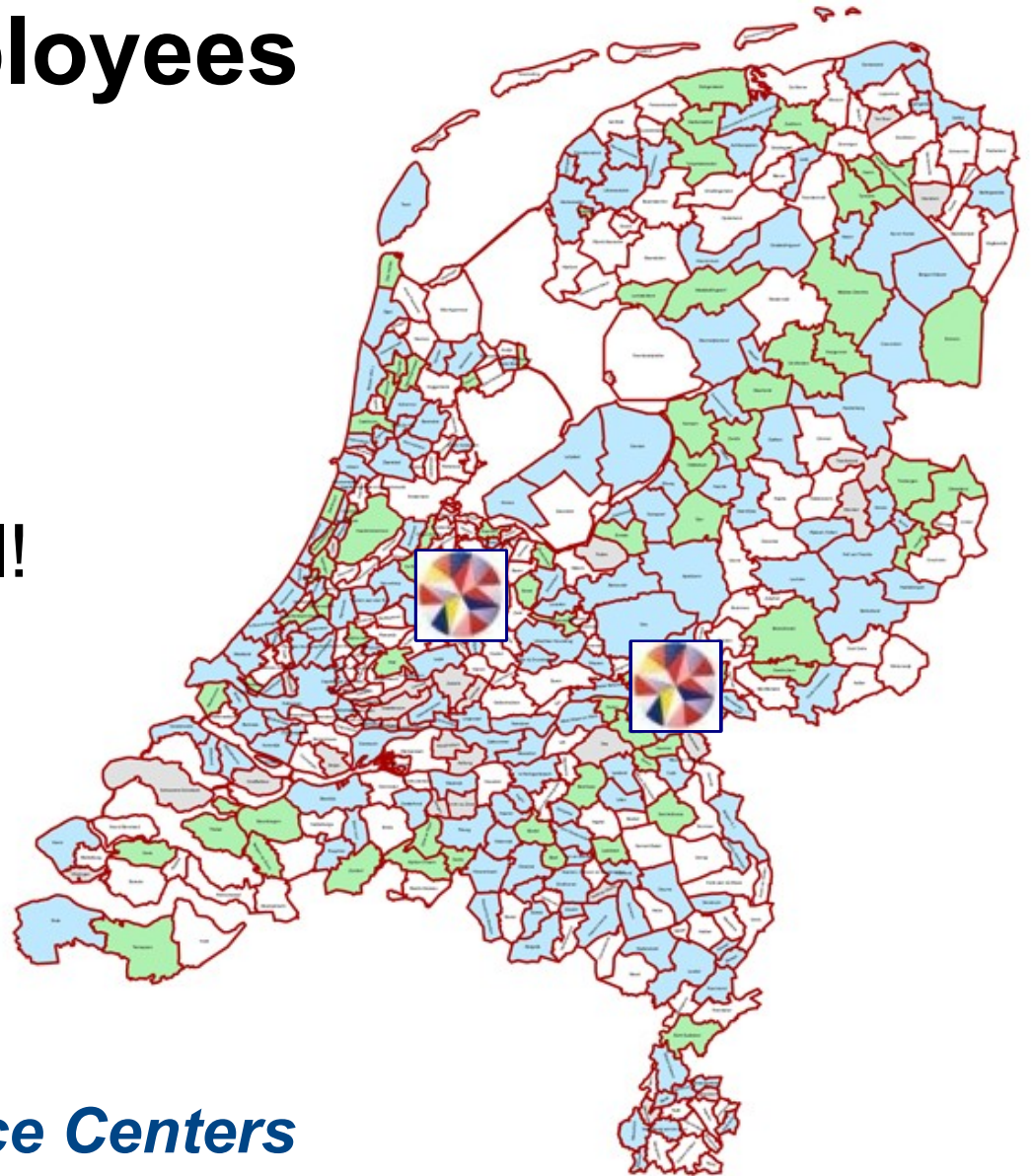
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# BPM impact on employees

- Don't underestimate:  
full scale BPM can cause a  
major change for personnel!



*From Branch Offices to Service Centers*

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# The BPM console (In2Flow)

**SNS Bank** Service Center Operations Bancair **in<sup>2</sup>Flow**

Start Zoeken Mijn wachtrij(3) Management

**Werkvoorraad**

- Beoordeel EVA toetsing**  
Binnen SLA: 4 Toegewezen: 1
- Beoordelen persoonlijke pas**  
Binnen SLA: 2 Toegewezen: 2 Verwerkt: 1 Door mij: 1
- Technische uitval**  
Binnen SLA: 5



**Beoordelen persoonlijke pas** Binnen SLA: 2 Toegewezen: 2 Verwerkt: 1 Door mij: 1

**Samenvatting**  
Aanvraag gegevens: Aanvragen debitpas(858273) 02-11-2010

**Gegevens aanvrager**  
Voorletters AA  
Tussenvoegsel  
Achternaam Wolfard  
Klantnummer 0

**Taakomschrijving**  
Beoordeel de foto op de persoonlijke pas door hem te toetsen aan de richtlijnen zoals die zijn opgesteld voor persoonlijke passen.

**Uitvalmelding**  
Extra info

**Notities** (voor intern gebruik)  
  
Richtlijnen

**Beoordelen**  
 Goedkeuren  
 Afkeuren

Opslaan Opslaan & volgende Annuleren Pauzeren

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# BPM impact on employees (2)

- Moving to centralized service centers means:
  - Hard to reach customers without Internet
  - No “human contact” with our customers
  - Less visibility, warmth, trust and reassurance

**=> Risk of losing customers**



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# From traditional Branches to “Shops”



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# The new distribution model

## Internet

“Do it yourself banking”



Complete online servicing and selling

(excl. complex products)

Stores and customer contact center

Assisted “do it yourself banking”



Provide assistance, lead generation and sales

Financial advice



Selling complex products



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# The new “SNS Shop”

- From < 150 traditional branches to > 250 SNS Shops
- Cashless (no deposits, no ATMs)
- DIY banking and assisted banking
- Longer opening hours, opposed to traditional banking hours
- Franchise model for 2/3 of SNS Shops

***=> It fills the gaps created by the new BPM solution***

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# Impact on customers

- More freedom in banking
- Quicker service request processing
- Better insight in request status
- Cheaper products & service
- **Downsides:**
  - Some services are no longer possible (or profitable)
  - Some customers prefer to be served



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# Lessons Learned – BPM Console

- One of the key features of a successful BPM solution!

*A not fully automated business process with good BPM console support is cheaper to implement and in the end more valuable to the Business*

- Not all tasks can be automated and expect failure
- A productive Service Center is worth its weight in gold

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# Lessons Learned – Process Status / BAM

- BPM needs to be transparent: What's going on?

*A centralized process status is essential to provide the correct information to both customers and employees*

- Not everything has to be STP, as long as it's visible
- Implement BAM (Business Activity Monitoring) to continuously improve your processes

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# Lessons Learned – Business / IT mismatch

- A business process definition  $\neq$  jBPM process flow
- Mind-shift from “systems” to “services”

*Try to close the gap between Business & IT*

- Appoint Business Process Architects and involve them!
- BPMN-2 looks promising (jBPM v5)

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# Lessons Learned – Maintainability

- Expect your BPM solution to be a success!

*Modularize every aspect of your BPM architecture*

- Avoid “exploding” data models or monolithic systems
- Use shared modules (framework, sub-processes)
- Minimize dependencies between modules

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# Lessons Learned – Process Updates

- How to update long-running processes (e.g. 6 months)
- Ideally, a business process is fully idempotent
- Unfortunately, a lot of legacy systems are not

*Process logic that's subject to change should be extracted from the process and moved into services (static) or a rules engine (dynamic)*

- Use versioning and respect backwards compatibility

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# Conclusions

*Open Source Software today is a very rewarding and mature alternative to expensively licensed solutions.*

*Especially with commercial OSS support - such as Redhat offers for the JBoss platform - there are no drawbacks*

*Full scale BPM is much more than “just another IT trick”. To be successful you must be prepared to fully involve and change your Business*



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# Results



- Expectations for the end of 2012
  - *20% increase in main bank customers*
  - *Three times more online sales*
  - *40% decrease in branch operating costs*
  - *Doubling of complex product sales (mobile sales advisors)*

## ● Forrester Case Study

***How SNS Bank Put The Web At The Heart Of Its New Multichannel Strategy***

[http://www.forrester.com/rb/Research/case\\_study\\_how\\_sns\\_bank\\_put\\_web/q/id/57867/t/2](http://www.forrester.com/rb/Research/case_study_how_sns_bank_put_web/q/id/57867/t/2)

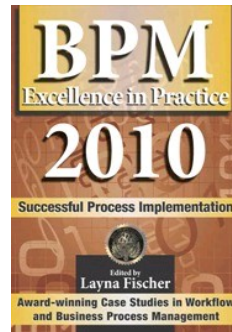
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# Q & A

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